

## DEPARTMENT OF TRANSPORTATION

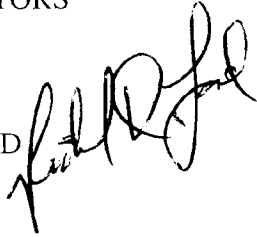
**M e m o r a n d u m**

*Flex your power!  
Be energy efficient!*

To: DISTRICT DIRECTORS

Date: November 22, 2006

From: RICHARD D. LAND  
Chief Engineer



File: Sect. 7.7 & 7.9 RTL Guide  
Supersedes: R. P. Weaver Memo, dated  
01/06/92: *Contract Supplemental Work*  
and Decision Document # 54, dated  
07/08/04 (both attached)

Subject: Construction Contract Contingencies and Supplemental Work

The Department limits funding for contingencies and supplemental work and limits the type of supplemental work:

1. To ensure full and open competition, and
2. To avoid cardinal changes.

Under the standard Changes Clause, an owner has the right to make changes within the general scope of the contract and the contractor has the obligation to perform this additional work. A contractor has no duty to perform work not within the general scope of the contract. Work outside the general scope of the contract is commonly called a cardinal change. If a change is considered a cardinal change, its work constitutes a new procurement and cannot be added by change order unless authorized as an exemption to the requirement for full and open competition.

Responsibilities for construction contract contingencies and supplemental work are:

Chief Engineer: Approves/disapproves district director requests to change contingencies from 5% of the project estimated cost.

District Directors:

1. Requests Chief Engineer approval to change contingencies from the standard 5% of the project estimated cost. This authority may not be delegated.
2. Requests Construction Division Chief approval to exceed supplemental work limits of:
  - 2.1 3% of the contract item total cost on major projects and major maintenance projects.
  - 2.2 5% of the contract item total cost on minor projects.

This authority may not be delegated below the deputy district director position.

Chief, Division of Construction: Approves/disapproves district director requests to exceed supplemental work limits. Negotiates and maintains the pre-approved Federally Participating Supplemental Work Items list. (Current list attached.)

Design Engineer or Manager: Ensures project engineer complies with construction contract contingencies and supplemental work standards and receives approvals before Plans, Specifications, & Estimate (PS&E) or Authority to Advertise District Delegation (AADD) contract submittal to the Division of Engineering Services – Office Engineer (DES-OE).

Project Engineers: Before PS&E or AADD submittal to DES-OE, project engineers will:

- Process construction contract contingency standard exceptions.
- Submit a justification for non-participating supplemental work items for FHWA Operations Engineer's review and approval on oversight projects.
- Submit a justification for non-participating supplemental work items for Federal Resources Office, Headquarters Division of Budgets' review and approval on State authorized projects.

If you have any questions, please contact Rebecca Harnagel, Chief, Office of Plans, Specifications and Estimates, Office Engineer, Division of Engineering Services, at (916) 227-6230 / Calnet 8-498-6230.

#### Attachments

- c: District Office Engineers  
DES-OE Specification Engineers  
Jason Dietz  
Jeffrey S. Lewis  
Robert Pieplow  
Steve Takigawa  
Mark Leja

RDH

## Memorandum

To : DISTRICT DIRECTORS  
DEPUTY DISTRICT DIRECTORS  
Project Development  
MR. TOM POLLOCK, Chief  
Office of Structure Design  
MR. BOB EVERITT, Chief  
Office of Project Development Alternatives

Date : January 6, 1992

File :

From : DEPARTMENT OF TRANSPORTATION

Subject : Contract Supplemental Work

Due to a large number of submitted projects which indicate a misunderstanding of the appropriate use of Supplemental Work, the attached policy is to be implemented immediately.

It is important to reemphasize that providing supplemental funds for work that reasonably can be designed as biddable by contract item is a violation of the State Contract Act.

The Supplemental Work may not be appropriate for the low bidder to perform and, in some cases, may require work for which the Contractor is not insured. Further, we should not tie up funds for an additional unsubstantiated "cushion" above a normal 5 percent contingency fund.

Written justification for individual or total supplemental work above the listed amounts must be requested by the Deputy District Director for Project Development, or by the District Director and must be approved by the Office Engineer or Chief, Division of Construction, as appropriate.



R. P. WEAVER  
Deputy Director  
Transportation Engineering

Attachment

January 6, 1992

### 3.3 SUPPLEMENTAL WORK.--

Supplemental Work is work which is anticipated and required for completion of the project as contemplated, but is of such an uncertain nature or amount that it cannot be done on a contract item basis.

Supplemental Work is not to take the place of complete design work and quantity calculations. When work can be shown or specified such that it is biddable, it must be paid for by contract item. To not do so is a violation of the State Contract Act.

Supplemental Work is not to be used to provide extra funds for contingencies by adding items or amounts in excess of what can be reasonably anticipated, and is not to be used to perform work which should be funded from other sources.

The Standard Specifications indicate various portions of removal work (unsuitable, slides, buried man made objects) will be paid as extra work. Funds for this work should come from contingencies unless specific information is available to indicate the amount of work will be enough to justify a separate entry in Supplemental Work.

When work is anticipated but the quantity cannot be estimated within 25 percent, it is appropriate to establish a contract item with the quantity set at a level such that an underrun of more than 25 percent is unlikely. Funds can then be included in Supplemental Work to cover overruns.

Individual Supplemental Work items equal to or above the following dollar amounts or percent of the Contract Items total amount, whichever is greater, requires written PS&E justification:

Minor "A" Projects	= \$ 4,000 or 5%
Majors Under 1 Million	= \$15,000 or 2.5%
Majors Over 1 Million	= \$25,000 or 0.1%

Total Supplemental Work (less excluded items) equal to or above the following dollar amounts or percent of the Contract Items total amount, whichever is greater, requires written PS&E justification:

Minor "A" Projects	= 10%
Majors Under 1 Million	= \$ 30,000 or 5%
Majors 1-5 Million	= \$ 50,000 or 3%
Majors 5-25 Million	= \$150,000 or 2%
Majors Over 25 Million	= \$500,000 or 1%

Written justification for individual or total supplemental work above the listed amounts must be requested by the Deputy District Director for Project Development, or by the District Director and must be approved by the Office Engineer or Chief, Division of Construction, as appropriate.

Justification must be based on factual information, such as experience with similar work, conditions and materials.

Supplemental Work is for contract funds which are to be paid to or through the Contractor. Contract funds which are to be paid to anyone else are included under State-Furnished Materials and Expense.

Extra work identified in the contract special provisions, other than work which is mentioned in a general way and which will not be of significant quantity, must be itemized as Supplemental Work.

Supplemental Work should follow the "Subtotal of Contract Items". Supplemental Work is to be subtotaled and included in the total project cost. Item codes for Supplemental Work must have a 06 prefix (06XXXX) to be properly calculated in the BEES.

The following is a partial listing of typical work for which it is normally appropriate and inappropriate to include funds in Supplemental Work when applicable:

#### APPROPRIATE

Additional Asphalt Concrete  
Additional Imported Borrow  
Increased Paving Asphalt

(Only if the type of work is a large percentage of total, material source is not known and material from different likely sources varies greatly in density.)

Clean and Seal Random Cracks  
Salvage and Stockpile Excess Screenings

Remove Unsuitable Material  
Remove Slide  
Subsurface Drainage  
Remove Rock and Debris from Planting Area

(If evidence indicates more than can be funded from contingencies.)

Maintain Traffic

(Excluded from guideline limits on Maintenance and Pavement Rehabilitation Projects.)

Maintain Detour  
Maintain Existing Plants  
Maintain Water Supply  
Maintain Existing Electrical System  
Apply Pesticide

(If need for extra work is related to the work being performed on the project in question.)

Detour Signing

(If on local streets or roads.)

Locate Existing Irrigation Facilities  
Hauling and Disposal of PCB  
Settlement Platform Installation

Modify Irrigation System

(For areas of coverage after new system has been tested.)

Compensation Adjustments for Price  
Index Fluctuations of Paving Asphalt

(For projects with 5,000 tons of Asphalt Concrete and 50 working days. Excluded from limits since calculated by formula.)

Federal Trainees

(If project is Federal Aid eligible, with 100 working days and \$400,000 contract item cost. One trainee per \$400,000 of work at a cost of \$800 per trainee.)

Repair Existing Irrigation System  
Prune Existing Shrubs

(If funded from Restoration Funds or if need related to work on project in question.)

Additional Footing Work

(Earthquake Retrofit projects.)

Clean Deck Joints

(Bridge Maintenance projects.)

Damage Investigation

(Bridge Repair projects.)

#### INAPPROPRIATE

Additional Roadwork  
Additional Drainage Work  
Additional Electrical Work  
Improvement for Safety  
Unforeseen - - - - -  
Possible - - - - -  
Miscellaneous - - - - -

(Too general. Entries for this type work may be appropriate if more specific.)

Clean Out Existing Culverts  
Repair Existing - - - - -

(Improper to perform maintenance work if funded from other than Maintenance funds.)

Railroad Work  
Electrical Service  
Resident Engineers Office  
Motorist Service Patrol  
Traffic Management Plan

(Include under State-furnished Material and Expense unless paid to or through Contractor.)

Haul Salvaged Material

(Should be included in contract item work unless hazardous material.)

**DECISION DOCUMENT  
Supplemental Work**

**Problem Statement:** The current list of supplemental work items and cost limits are very broad resulting in supplemental work growing to a current average of 8 percent of the total contract allotment. Ineffective limits on the amount of supplemental work:

- Lowers the amount of competitively bid work, thereby increasing capital and capital support (contract administration) costs,
- Obligates more funding than necessary to complete projects, thereby reducing the total number of projects that could have been delivered each calendar year.

**Recommendation:** Improve the compliance with Public Contract Code and the cost effectiveness of construction contracts by limiting supplemental work to:

1. Work identified in the Standard Specifications or a Standard Special Provision (SSP) as extra work and the cost would be significant. The Division of Construction will establish and regularly update the list of pre-approved items.
2. A total supplemental allotment not to exceed 3 percent of the contract items total for major contracts and 5 percent of the contract items for minor contracts. The Division of Construction may establish specific project categories with higher total allotment percentages.

Exceptions require written request by district management (Deputy District Director of Construction) subject to approval of the Construction Division Chief.

**Fiscal Impact:** Probable increase in capital support costs to provide more full, complete, and accurate contracts with a lower capital cost from competitive bidding and reduced contract administration. Funds that would have been designated for supplemental work are available for programming additional projects.

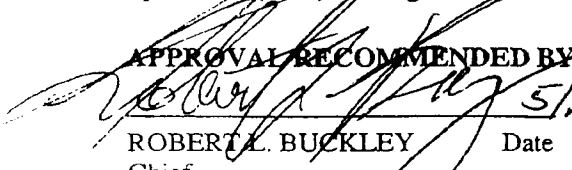
**Policy Impact:** Supersedes R. P. Weaver Memorandum dated January 6, 1992.

**Organizational Impact:** None.


**Risk(s):** Delays in some project delivery to improve compliance with Public Contract Code.

**Proposed Implementation Schedule:** Compliance required on all projects that are brought to Ready To List (RTL) starting in the 2005/2006 Fiscal Year.

**APPROVAL RECOMMENDED BY:**

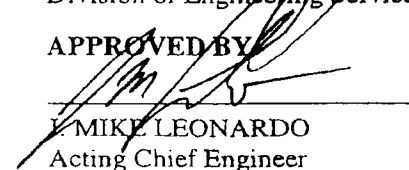
  
ROBERT L. BUCKLEY  
Chief  
Division of Engineering Services

5/28/2004  
Date

  
ROBERT PIEPROW  
Chief  
Division of Construction

6-16-04  
Date

**APPROVED BY:**

  
MIKE LEONARDO  
Acting Chief Engineer

7/8/04  
Date

Attachment

*"Caltrans improves mobility across California"*

## **Decision Document Attachment Supplemental Work**

1. **Problem statement:** The current list of supplemental work items and cost limits are very broad resulting in supplemental work growing to a current average of 8 percent of the total contract allotment. Ineffective limits on the amount of supplemental work:
  - Lowers the amount of competitively bid work, thereby increasing capital and capital support (contract administration) costs,
  - Obligates more funding than necessary to complete projects, thereby reducing the total number of projects that could have been delivered each calendar year.
2. **Recommendation:** Improve the compliance with Public Contract Code and the cost effectiveness of construction contracts by limiting supplemental work to:
  1. Work identified in the Standard Specifications or a Standard Special Provision (SSP) as extra work and the cost would be significant. The Division of Construction will establish and regularly update the list of pre-approved items.
  2. A total supplemental allotment not to exceed 3 percent of the contract items total for major contracts and 5 percent of the contract items for minor contracts. The Division of Construction may establish specific project categories with higher total allotment percentages.

Exceptions require written request by district management (Deputy District Director of Construction) subject to approval of the Construction Division Chief.

3. **Background:** Public Contract Code 10120 requires contracts to be full, complete, and accurate. The RTL Guide identifies supplemental work "is work that is anticipated and required for completion of the project but is of such an uncertain nature or amount that it cannot be done on a contract item basis."

In addition to potentially violating the Public Contract Code, misuse of supplemental work can create situations where the work is not appropriate for the low bidder to perform (applicable license or insurance) and unnecessarily ties up program funds.

In 1992 the list of approved supplemental work was only 28 items. The list of items has more than doubled and the allotment has grown to a current average of 8 percent of the total contract allotment.

#### **4. Alternative: "No action alternative..."**

- 4.1 This alternative is not desirable because supplemental work allotments will continue to leave the department at risk for compromising the bidability of advertised contracts and for fiduciary mismanagement of project and program funding.

#### **5. Alternative (Recommended alternative): "Supplemental Work is limited to work specifically approved in the contract as extra work"**

- 5.1 This alternative ensures that supplemental work required for completion of the project is legal and cost effective for both capital and capital support.



**Decision Document Attachment  
Supplemental Work**

- 5.2 Fiscal Impact: Probable increase in capital support costs to provide more full, complete, and accurate contracts with a lower capital cost from competitive bidding and reduced contract administration.
- 5.3 Policy Impact: Supersedes R. P. Weaver Memorandum dated January 6, 1992.
- 5.4 Organizational Impact: None.
- 5.5 Risk(s): Delays in some project delivery complying with Public Contract Code.
- 5.6 Proposed implementation schedule: Compliance required on all projects that are brought to RTL starting in the 2005/2006 Fiscal Year.

**6. Performance measures:**

- 6.1 Deliverable: List of items approved as supplemental work and limits on allotment.
- 6.2 Track and evaluate effect of the change: Monitor the number of approved supplemental work exceptions.

- 7. Contact person: Rebecca Harnagel, Division of Engineering Services – Office**  
Engineer Chief of Plans, Specifications & Estimates Office,  
([rebecca.harnagel@dot.ca.gov](mailto:rebecca.harnagel@dot.ca.gov)), 916-227-6230.

<b>FEDERALLY PARTICIPATING SUPPLEMENTAL WORK ITEMS</b>		
<b>Item Code</b>	<b>Supplemental Work Item</b>	<b>Rationale</b>
066070	Maintain Traffic	Cost is to cover the 50% State share of flagging and 100% of other traffic-handling equipment and devices used in carrying out provisions in Sections 7-1.08 and 7-1.09 and the special provisions that are ordered by the Engineer.
066015	Federal Trainee Program	Cost is for the training expenses as part of the Contractor's equal employment opportunity affirmative action program per CFR. The Contractor is to provide on-the-job training to develop full journeymen in the types of trades or job classification involved in the contract.
066595	Water Pollution Control Maintenance Sharing	Cost is to cover the 50% State share for maintaining the temporary water pollution control items identified on the approved Water Pollution Control Cost Break-Down.
066610	Partnering	The State promotes the formation of a partnering relationship with the Contractor in order to effectively complete the contract to the benefit of both parties. The cost for providing the "Training in Partnering Concepts" trainer and training site is to be paid for by the State and the "Partnering Workshop" facilitator and workshop site is to be paid equally by the State and Contractor.
066666	Compensation Adjustment for Price Index Fluctuations of Paving Asphalt	The cost is to compensate the Contractor for fluctuations for the paving asphalt used in asphalt concrete, asphalt concrete base and asphaltic emulsion that will occur during performance of the contract.
066920	Disputes Review Board	Disputes Review Board is to assist in the resolution of disputes or potential claims arising out of the work of the contract. It is established by the Engineer and Contractor cooperatively upon approval of the contract. The cost is equally paid for by the State and the Contractor.
066094	Value Analysis	The \$10,000 required by SSP for a "Value Analysis" workshop. This is VA effort after the award of the contract. The purpose of the workshop is to identify value enhancing opportunities and to consider modifications to the plans and specifications that will reduce either the total cost, time of construction or traffic congestion, without impairing, in any manner, the essential functions or characteristics of the project.
066845	Incentive for Asphalt Concrete (QC/QA)	Cost is to cover the incentive for exceeding the minimum requirements of the special provisions. Four percent of the estimate for asphalt concrete is provided when the QC/QA provisions are included in the contract.
066597	Storm Water Sampling and Analysis	These funds compensate the contractor for performing storm water sampling. These costs can vary widely due to the frequency of storm activity during the life of the project. This is due to the sampling frequency required. Samples for the applicable non-visible pollutants and a sufficiently large uncontaminated background sample are collected during the first two hours of rain event discharge that result in a sufficient discharge for sample collection. Due to the uncertain frequency of testing required, this work is included in supplemental funds.
066596	Additional Water Pollution Control	To cover overruns on bid items in the event of heavier rainfall than normal during the life of the project.